Nutrition News

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

By L. B. PEARSON, Chairman
United Nations Interim Commission on Food and Agriculture

The relation of food to health, agriculture, and economic questions was, just before the war, a major preoccupation of governments at the League assemblies. It was two years before V-J day that President Roosevelt invited the United Nations to place food and agriculture in the forefront of their postwar problems, by participating in the first of the United Nations Conferences—held at Hot Springs, Virginia.

The Conference made history because it declared that poverty and malnutrition are not inevitable. Through separate and collective action by the nations to bring into service modern agricultural science, modern communications, and the newer science of nutrition, the "goal of freedom from want of food suitable and adequate for the health of all peoples can be achieved."

The Conference also recommended that the United Nations should establish an International Food and Agriculture Organization (FAO) to help the nations achieve this goal.

To work out specific plans for this organization, an Interim Commission, composed of one member from each of the original forty-four United Nations, was set up in Washington in July 1943. The Interim Commission brought to its aid scientists, technicians, and economic experts. It has submitted the constitution of FAO to governments and has prepared a series of technical reports to assist the governments in planning the early work of FAO.

In accepting the constitution of FAO, the Nations agree,

> "to promote the common welfare by furthering separate and collective action . . . for the purposes of raising levels of nutrition and standards of living . . . securing improvements in the efficiency of the production and distribution of all food and agricultural products, bettering the condition of rural populations, and thus contributing toward an expanding world economy."

The adhering governments also agree to report to one another through FAO on the measures taken and the progress achieved in these fields of action. This undertaking is something new in international history.

How FAO Functions

FAO will function through an annual conference composed of representatives of all member governments, a small executive committee, a permament international staff, serving under a Director-General, who will call to his aid, from time to time, standing Advisory Committees composed of world experts in agriculture, nutrition, forestry, fisheries, and statistics.

The cost of FAO has been estimated at $5,000,000 for the first five years and will be borne by the governments on a scale agreed to by them.

The general functions of FAO will be to act as the international center of, and the spokesman for, producers of food and other products of agriculture, forestry, and fisheries. It will also represent the interest of consumers. One of its main purposes will be to link the newer knowledge of nutrition with the newer knowledge of production and thus to accelerate progress in health and well-being.

The more specific functions will be wide, and only some of them can be indicated here. FAO, although it will not itself have laboratories, will encourage research and seek to secure cooperation in the solution of nutritional and agricultural problems. It will serve as a center of information and will in some cases develop its own statistical and information services and will help national governments to improve their own services. It may furnish other forms of technical aid to governments through technical missions, or through arrangements for individual experts to assist in the solution of specific problems. It will be concerned with the spread of public knowledge of nutritional and agricultural science and practice.

Mr. Pearson

In the discharge of its great task, FAO will have to work in cooperation with the general organization of the United Nations and with the other specialized organizations in the general international framework. This is already provided for in the San Francisco Charter. In particular, it will need to establish close association with the proposed International Bank for Reconstruction and Development (whenever the Bank's investment policies affect agriculture) and with the projected International Health Organization in the field of nutrition.

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Glances AT NUTRITION RESEARCH

Within recent months, a number of research reports concerning butterfat have appeared in the literature. The results presented reveal new information on the nutritional value of this dairy food.

Vitamin A Value of Butter—A national, year-round study of the vitamin A potency of butter has been completed. Summer butter, representing 64 per cent of the total national production, averaged nearly 18,000 I. U. of vitamin A per pound; winter butter averaged 11,200 I. U. per pound. The vitamin A content of an average pound of butter is estimated to be 15,000 I. U. An average quart of milk contains about one tenth the amount of vitamin A in one pound of average butter.

In 1941, dairy foods contributed 1,600 I. U. (one third of the average adult requirement) of vitamin A to the average daily diet. Butter provides almost one half of the vitamin A contributed by dairy foods.

—U. S. Dept. Agri. Misc. Pub. 571, 1945.

Utilization of Food Carotene—It was demonstrated that carotenes from different sources differed widely in their availability to rats. The vitamin A stored when various vegetable sources of carotene were fed averaged 32 per cent of the amount stored when beta carotene was fed. When butterfat and raw beef liver were fed, the vitamin A storage (derived from both the carotene and vitamin A of these foods) exceeded that induced by beta carotene in oil by 45 and 79 per cent, respectively.

"The results show that fat or oil in the food increases the storage of carotene. A deficiency of fat in the diet resulted in a lower storage of vitamin A in the rat liver."

—Food Research 10:187 (May-June) 1945.

Relation of Dietary Fat and Vitamins—A study of the growth-promoting effects of butterfat and corn oil, when fed in combination with various carbohydrates, revealed an increased need for water-soluble vitamins when corn oil was fed. On normal vitamin levels, rats receiving combinations of butterfat and any of six carbohydrates grew markedly better than rats receiving similar carbohydrates in combination with corn oil.

The difference in growth performance could be eliminated on all diets, save those containing lactose, by feeding a liver preparation and high levels of B-vitamins. The authors attribute these results to the influence of butterfat and certain carbohydrates on the growth of beneficial intestinal organisms which probably produce necessary nutrients. These foodstuffs apparently lower the dietary need for the B-vitamins in this manner.

—Arch. Biochem. 7:143 (June) 1945.

Fatty Acids and Carotene—Rats fed the unsaturated fatty acids of butterfat grew better than those receiving the saturated fatty acids. This superiority in growth performance apparently was due in part to the greater degree of intestinal absorption of the liquid, unsaturated fractions. The solid, saturated fatty acids were absorbed only one half as efficiently.

Liver analyses showed that the animals on the unsaturated fatty acid diets had stored approximately twice as much vitamin A as did those on the diets containing the saturated groups.

—J. Nut. 29:349 (May) 1945.

TIMELY TOPICS

Mr. L. B. Pearson

Mr. L. B. Pearson, author of the leading article in this issue, is Canadian Ambassador to the United States. He was senior advisor of the Canadian delegation to the San Francisco Conference and chairman of the United Nations Interim Commission on Food and Agriculture. Mr. Pearson was chairman of the UNNRA Council meeting in Montreal, and has been Canada's representative to the London Naval Conference, League of Nations, and United Nations Conference on Food and Agriculture.

FAO Established

To date twenty-five governments, including that of the United States, have accepted the constitution of the Food and Agriculture Organization, and it is expected that within the next few weeks a number of other governments will have adhered. The first conference of FAO, which will bring the organization formally into existence, will be held in Quebec, Canada, October 16.

War Improves Diet

A poll conducted by Dr. Arthur Kornhauser of Columbia University in which he queried 42 nutrition experts reveals nutritionists feel the American diet has improved during the war. This is due to greater purchasing power, availability of certain valuable foods, including milk, wartime nutrition education, and school lunch programs. However, deficiencies still existing, are calcium, thiamine, and riboflavin. Milk is cited by experts as excellent in improving poor diets.

SOME OBSERVATIONS ON NUTRITION IN PERU

By Frances MacKinnon, Consultant in Nutrition, Children's Bureau, U. S. Department of Labor

Miss MacKinnon, a member of the Inter-American Cooperation Unit of the Children's Bureau, was assigned to Peru in 1944 and 1945 as a nutrition consultant to the Ministry of Health.

The Peruvian, explaining his country to a foreigner, invariably begins his explanation with the same sentence, "Peru is divided into three parts: the coast, the sierra, and the jungle." He goes on to tell how the differing conditions of soil and climate make a distinct way of life for the people residing in each part.

To one who has spent a year in Lima, only the diet of the coastal region is familiar. From the north of Peru south into Chile, the coast is a bleak desert. However, where a river fed by Andean snows makes irrigation possible, the land blooms with tropical luxuriance. In these valleys the great haciendas grow rice and corn, sugar cane, bananas, and wonderful oranges.

A vantage point for studying Lima's food supply is the balcony of the Central Market. In the meat section one sees all parts of the animal offered for sale. The viscera serve as the base for many famous Limean dishes: cau-cau a kind of stew with tripe, vegetables and plenty of red pepper; or the delicious anticuchos, made of marinated heart muscle skewered on a stick, which one finds broiling on coal braziers in the streets on fiesta days.

No milk is sold in the market. However, there is always plenty of a soft white cheese made principally from goat's milk. It is not cheap and is bought in small quantities, just enough to spread on hard rolls for breakfast or to season a sauce for vegetables such as the yellow dressing for "papas a la Huancayna." Eggs are scarce and expensive; butter is of a rather poor quality. Both fresh and canned milk are sold in the stores or the former is delivered by dairy trucks, but the supply of either is far from adequate and the price is beyond the reach of the poor. Reconstituted dried milk is given to the mothers of small children at the dispensaries operated by the government. The shortage of animal protein is a critical feature of the coastal diet, at least in the cities, and one finds many cases of nutritional edema among babies and small children.

There is always chard and spinach in the market, but the leaves of turnips and beets are discarded and fed to the farm animals. Parsley and culantro, a spicy green leaf, are purchased daily for seasoning. Of yellow vegetables there is always an abundance and a great variety: squashes with a high carotene content, carrots, yellow potatoes, ollucos, and camotes which are like our sweet potatoes. Beets, turnips, celery, cabbage, cauliflower, white potatoes, and especially tomatoes are popular. In spite of the variety and abundance of vegetables, Peruvians do not eat them in quantity. It is unsafe to eat vegetables raw and the salads made of cooked beets, potatoes, and peas or lima beans are not very savory. In the homes of the masses there are no ovens, fuel is scare, and the food must be prepared usually in one utensil by boiling or frying. There is small opportunity for variation in the methods of preparing vegetables, and consequently they are almost universally disliked.

On the other hand, fruit is very popular. The seasonal variations are known to everyone and when a fruit is in season it is eagerly sought. The stalls of the fruit vendors add a colorful note to the city, and the people buy fruit as Americans buy drinks and ices at a drugstore fountain. Fresh fruit is usually served as dessert with one meal.

In the "bodegas" are sold the staples such as legumes and cereals. Dried beans, peas, garbanzos, or lima beans are used almost daily in every household. White rice is served at least once and usually twice a day. Farina or spaghetti are used daily in soup. Oatmeal and quinoa, an indigenous grain of high nutritive value, are the only whole cereals available and are used not more than once or twice a week. The consumption of sugar and pastries —in fact, all carbohydrates—is very high and it would seem that the intake of thiamine, even in the diets of the well-to-do, is markedly deficient.

Medical scientists in Peru agree that widespread malnutrition is one of the primary health problems of the country, but at present there are no trained specialists such as nutritionists and health educators to undertake such a program on a national scale. However, the Minister of Health has taken a keen interest in the problem and educational programs are being considered.

"WHAT DID YOU EAT YESTERDAY" REVEALS FOOD HABITS IN RECENT SURVEY

By Dr. Viola Bell, Chairman, Macon County, Illinois, Nutrition Committee

A survey or fact-finding group of the Macon County Nutrition Committee was given the job of determining the dietary habits of Macon County residents. This was done as a stepping stone to a broader program of improving dietary habits in areas where such improvement was found necessary. Miss Rubye Mochel was chairman of the survey group.

Our group worked on the premise that foundation for buoyant health can be built around seven simple foods—milk, eggs, fruits, seafood, meat, vegetables, and enriched bread or whole-grain cereals. With this information as background, we attempted to obtain a rough picture of eating habits of our residents through the following four channels. (1) A sampling of a cross section of the population with a questionnaire asking, "What Did You Eat Yesterday?" (2) A study of grocery purchases at various economic levels. (3) A study of lunch selections in public school cafeterias. (4) A survey of the amount of milk consumed daily in this community.

The questionnaire was sent to 25 rural and city schools (1565 enrolled), industrial groups (156 people), housewives, PTA, relief clients (646 people). In this way a total of 2367 answers were obtained from a representative community group. The results of the day's survey were as follows: 76% had milk or buttermilk, 80% had 3 or more pats of butter, 59% had an egg, 26% had cheese or cottage cheese, 73% had a serving of meat, fish, or fowl, 89% had citrus fruit or tomato, 91% had "fresh" green or yellow vege-

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DID YOU KNOW

—that civilians are drinking between 20 and 25 per cent more milk today than they did in prewar days?

—that there were enough chicks hatched in the United States in 1943 so that every man, woman, and child could have a dozen?

—that milk was used in Egypt Before Christ as a sacred fluid for annointing the holy altars?

—that nutmeg is used as a gypsy love charm?

—that a new process for peeling rice has been developed which insures a white rice but retains the vitamin content?

—that vitamin C and carotene, a precursor of vitamin A, are found in spices? Both chili and paprika contain these vitamins.

—that mobile flour mills for liberated areas in Europe are being made in England?

—that the more sunlight a tomato gets during growth, the more vitamin C it contains?

—that electronic blanching of fruits and vegetables cuts down vitamin loss?

THINGS YOU'LL LIKE TO READ

FOOD FOR THE FAMILY OF NATIONS—H. R. Tolley and L. D. Stinebower. United States Government Printing Office, Washington, D. C. 1945. 5 cents.

Much interest in the newly-formed Food and Agriculture Organization prompted the publishing of this pamphlet on the organization's purpose, functions, structure, and relation to other international organizations.

A FOOD AND NUTRITION PROGRAM FOR THE NATION—National Planning Association, 800 21 Street, N. W., Washington 6, D. C. Pamphlet No. 46. May 1945. 25 cents.

Through the efforts of agriculture, business, and labor, a food and nutrition program for the nation has been planned. The needs of the professional, educational, consumer, and business groups for nutrition information is emphasized. The over-all plan is made to reach all groups and over a period of time designed to assure a healthy citizenry.

EVERYDAY NUTRITION FOR SCHOOL CHILDREN—E. Neige Todhunter, Ph. D. Extension Division, University of Alabama. 1945. Single copies 25 cents.

This booklet for elementary and high school teachers gives concrete objectives in teaching nutrition, planning a nutrition program, and judging good nutrition. It shows what constitutes a good and poor breakfast and lunch, discusses the basic seven food groups. Everyday nutrition questions are answered, activities and suggestions for teachers are given along with an excellent bibliography.

MEDICAL SURVEY OF NUTRITION IN NEWFOUNDLAND—National Research Council, Washington 25, D. C. 1945.

The methods used in the comprehensive study of nutritional deficiencies in Newfoundland will be of great interest to nutritionists and clinicians. This study shows what can be done to survey population groups for dietary inadequacies, and points a way to remedial measures to be taken.

"WHAT DID YOU EAT YESTERDAY" REVEALS FOOD HABITS IN RECENT SURVEY

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table, 50% had "other vegetables," 79% had potato, 88% had three or more slices of bread, 45% had cooked cereal, 35% had ready-prepared cereal, 87% had pie, cake, pastry, etc., 44% stated they had candy.

Some interesting variations occurred in representative groups. College students reported 89% had milk, 90% had citrus fruit or tomato, 83% had green or yellow vegetable, 80% had one or more potatoes, 42% had eggs, 72% had pie, pastry, cake, 61% had soft drink.

The food habits of the industrial group showed that 90% had meat, 67% had eggs, 65% had milk, 73% had "fresh" vegetable, 66% had pie, pastry, cake, 41% had cokes, 83% had potatoes, 89% had citrus fruit. As a whole the industrial group seemed to have better food habits than the college group.

Over a two-week period the grocery purchases of 42 families were studied. Ten of the families were on relief, 22 were middle class, and 10 were higher income families. When summarized, our study indicated that as the family income increases, proportionately more money is spent for fresh fruits, vegetables, milk, and meat.

Our survey of lunch habits in five high schools indicated that more time should be spent in teaching the value of a good lunch. Only 25% of the student group were using facilities provided and lunch selections were generally poor.

An area for concentration in improving food habits seems to be the consumption of milk. During the month studied, about 129,994 gallons of whole or skimmed milk, chocolate milk, buttermilk, and cream were sold in Decatur. This means only 0.6 pint of milk per person per day is used in this community instead of the usually-accepted standard of a quart per child or a pint for each adult.

The Macon County Nutrition Committee through these studies have seen the need of increasing the consumption of milk, and encouraging better use of the school lunch facilities. However, we feel that the sampling made of local dietary habits is indicative of dietary habits in midwestern United States.